



In the Claims:

Please cancel Claims 1, 20, 41, and 58. Please amend Claims 2, 5, 6, 16, 21, 24, 25, 36, 59, 62, 63, 74, 75, 81-83 as indicated below.

2. (Amended) [The] A ubiquitin fusion protein [of Claim 1] comprising ubiquitin fused to a single epitope-containing segment, the epitope containing segment comprising two or more identical epitopes, the fusion protein being characterized by the ability to stimulate an immune response to the heterologous epitope contained therein [wherein the heat shock protein is ubiquitin and the fusion protein is a ubiquitin fusion protein].

5. (Amended) The ubiquitin fusion protein of Claim 2 wherein the N-terminal residue of ubiquitin is a residue other than methionine, and the N-terminal residue other than methionine is fused to the C-terminal residue of an additional C-terminal ubiquitin subdomain competent to specify cleavage by a ubiquitin-specific protease between the C-terminal residue of the additional C-terminal ubiquitin subdomain and the N-terminal residue other than methionine.

5. (Amended) The ubiquitin fusion protein of Claim ⁴/₅ wherein at least one epitope-containing segment is positioned between the C-terminal residue of the additional C-terminal ubiquitin subdomain and the N-terminal residue other than methionine, and the C-terminus of the additional C-terminal subdomain is modified to inhibit cleavage by a ubiquitin-specific protease.

14. (Amended) The ubiquitin fusion protein of Claim ¹/₁₄ wherein the epitope containing segment is fused to ubiquitin at an internal fusion site[s] which is located at a [comprise

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- residue other than
ubiquitin fusion p
itope-containing
terminal residue o
main and the N-te
the C terminus o
modified to inhibit
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region[s] of ubiquitin which links[ing] two ubiquitin domains of secondary structure [, the two domains of secondary structure being] selected from the group consisting of β -strand and α -helix.

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42. (Amended) [The] A ubiquitin fusion protein [of Claim 41] fused to a single epitope-containing segment comprising two or more identical or non-identical epitopes, the epitope-containing segments being fused to ubiquitin at fusion sites selected from the group consisting of the N-terminus and an internal fusion site, [wherein the heat shock protein is ubiquitin and] the [fusion protein is a] ubiquitin fusion protein being characterized by the ability to stimulate an immune response to at least one of the heterologous epitopes contained therein.

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45. (Amended) The ubiquitin fusion protein of Claim 42 wherein the N-terminal residue of ubiquitin is a residue other than methionine, and the N-terminal residue other than methionine is fused to the C-terminal residue of an additional C-terminal ubiquitin subdomain competent to specify cleavage by a ubiquitin-specific protease between the C-terminal residue of the additional C-terminal ubiquitin subdomain and the N-terminal residue other than methionine.

46. (Amended) The ubiquitin fusion protein of Claim 45 wherein at least one epitope-containing segment is positioned between the C-terminal residue of the additional C-terminal ubiquitin subdomain and the N-terminal residue other than methionine, and the C-terminus of the additional C-terminal subdomain is modified to inhibit cleavage by a ubiquitin-specific protease.

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56. (Amended) The ubiquitin fusion protein of Claim 42 wherein the epitope containing segment is fused to ubiquitin at an

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internal fusion site[s] which is located at [comprises] a region[s] of ubiquitin which links[ing] two ubiquitin domains [regions] of secondary structure selected from the group consisting of β -strand and α -helix.

59. (Amended) [The] A ubiquitin fusion protein [of Claim 58] comprising ubiquitin fused to a single epitope-containing segment comprising one or more identical or non-identical epitopes, the epitope-containing segment being fused to ubiquitin at the N-terminus of ubiquitin, [wherein the heat shock protein is ubiquitin and] the [fusion protein is a] ubiquitin fusion protein being characterized by the ability to stimulate an immune response to at least one of the heterologous epitopes contained therein.

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62. (Amended) The ubiquitin fusion protein of Claim 59 wherein the N-terminal residue of ubiquitin is a residue other than methionine, and the N-terminal residue other than methionine is fused to the C-terminal residue of an additional C-terminal ubiquitin subdomain competent to specify cleavage by a ubiquitin-specific protease between the C-terminal residue of the additional C-terminal ubiquitin subdomain and the N-terminal residue other than methionine.

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63. (Amended) The ubiquitin fusion protein of Claim 62 wherein at least one epitope-containing segment is positioned between the C-terminal residue of the additional C-terminal ubiquitin subdomain and the N-terminal residue other than methionine, and the C-terminus of the additional C-terminal subdomain is modified to inhibit cleavage by a ubiquitin-specific protease.

74. (Amended) A DNA construct encoding a ubiquitin fusion protein [of] as described in Claim[s] [20] 21, [41] 42, or [58] 59.

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